

## An NCPR Working Paper

# The Quandaries of Basic Skills in Community Colleges: Views from the Classroom

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## **Abstract**

Basic skills courses are designed to teach students certain basic academic competencies they have not mastered. However, very little research has examined the quality of instruction inside basic skills classes. This paper presents preliminary findings from observations in 13 California community colleges. The clearest finding is that “remedial pedagogy” predominates — this is a pedagogy involving drill and practice on small sub-skills, stressing correct answers rather than conceptual understanding, with very little contextualization. Innovation usually occurs when individual instructors develop idiosyncratic practices or in the few cases where departments have organized to develop non-remedial approaches, but the college is rarely the locus of innovation. In addition, basic skills students are enormously heterogeneous, complicating the challenges of instruction, and most student support seems relatively weak. These findings help to explain why basic skills instruction is so often ineffective.

Colleges influence basic skills instruction in various ways. Pre-service preparation in teaching is non-existent and professional development is weak, so there are few institutional methods to improve instruction. Bureaucratic procedures sometimes inhibit innovation, as does territoriality around money, faculty positions, and other resources. The practice of “batch processing,” or of requiring students to take 12–15 week courses, inhibits efforts to individualize instruction. The alignment and articulation of basic skills assessments, subsequent courses, and college-level requirements are weak, such that the trajectory through basic skills is rarely smooth. The large numbers of adjunct faculty teaching basic skills inhibit any institutional coherence. Finally, colleges don’t display much instructional leadership, so that individual innovations and “little programs” — which are often inconsistent and incoherent — dominate innovation. Identifying these weaknesses then provides an agenda for reforming both instructional practices and the institutional conditions that influence them.



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## 1. Introduction

Several metaphors indicate the difficulty of getting inside the classroom. Cuban (1990) provides an ocean metaphor, in which waves on the ocean surface — the vociferous debates about educational policy and direction, often prompted by economic and political crises far from education — have only some influence on those issues closer to the surface — such as greater effectiveness, or equity and narrowing the achievement gap, or now College for All — and no influence whatsoever on the classrooms buried deep beneath the waves. David Labaree has noted that most of the discussion about education is *rhetoric*, where most reform efforts begin and end; while some rhetoric is translated into *formal changes* at the federal, state, or district levels, still less finds its way into *teaching practices* in the schools and classrooms, and *student learning* is the most difficult to change, because it requires student participation as well.

However difficult it may be to get inside the classroom, it is the place — almost but not quite the only place — where learning occurs. In the conventional instructional triangle in Figure 1 (Appendix A), the interactions among the instructor, the students, and the content or curriculum determine the extent of learning, and if there are inconsistencies between any two elements, something is likely to go wrong. The institutional conditions surrounding the classroom affect all three of these components, as well as the interactions among them, but if they do not affect the classroom, they cannot improve learning. If the challenge in basic skills instruction is to enhance learning and progress, there is no choice but to enter the classroom to see what happens in the interactions among students, teachers, and content, and to see how institutional policies affect (or fail to affect) classroom interactions. Unfortunately, very little research on community colleges has reported what happens there.<sup>1</sup>

The purpose of this paper is therefore to describe what instruction in basic skills looks like — based on observations in classrooms to describe the instructional triangle, as well as on interviews about institutional settings — to analyze the institutional and policy effects on instruction. (The research in progress underlying this paper is described in more detail in Appendix B). The first section reviews the arguments on why the quality of instruction matters. The second describes what instruction looks like, for better and (all too often) for worse, covering points that cannot be understood without classroom observations. The third section reviews some of the institutional features of community colleges that affect basic skills instruction. The final section makes several recommendations for policy

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<sup>1</sup> The exceptions include Richardson, Fisk, and Okun (1983); Grubb (1999); Seidman (1985), who reports what instructors say about teaching; Goto (1998); Worthen (1997), relying on the same data as Grubb (1999); Cox (2009); and our current research on basic skills instruction described in Appendix B.

and practice, since basic skills instruction will not improve substantially unless institutional policies and classroom practices change dramatically.

## 2. Why Instruction Matters

While it seems ludicrous to have to defend the importance of instruction, it often seems like the last topic anyone wants to discuss — witness the vast amount of writing about basic skills that never mentions instruction. Even in K-12 education, where a new conventional wisdom has declared the quality of teaching to be the most important element in effective schools, the discussion about what “good teaching” means has been incredibly confused. The perspective I take is that good teaching can be identified by the behavior of teachers in the classroom, as opposed to being identified mainly by credentials (which may reflect content knowledge only, or which may not lead to different classroom practices), by what they know (since more extensive knowledge may not lead to improved teaching practices), or by *ex post* measures of what students have learned including value-added measures, both because of horrendous technical problems with value-added measures and because they cannot tell us what about an instructor’s practices has improved student learning. To understand basic skills instruction — or any other kind of teaching — it is absolutely necessary to enter the classroom and examine the “instructional triangle” in Figure 1, and no discussion about the institutional and policy contexts of teaching can compensate for the lack of observation.

Classroom practices have been described in many ways, though many observers have divided practices into two polar opposites. On the one hand are those pedagogical approaches called constructivist, student-centered, “progressive,” conceptual, “active,” “teaching for meaning,” or innovative, while others are called behaviorist, teacher-centered, traditional, conventional, information transfer, or passive. Different vocabularies have been used to describe these two approaches: the instruction for computer programming uses the terminology of “systematic” versus “minimalist” teaching, math often uses “complex instruction” to refer to conceptual approaches; I have used the terms “systems” vs. “skills” approaches to describe teaching in vocational subjects, and a confusing discussion about behaviorist “teaching” versus constructivist “learning” has taken place in community colleges.<sup>2</sup> Of course, any time there are two polar opposites like behaviorist vs. constructivist teaching, there are many practices that fall in between, including instructional practices that draw on both schools of thought.<sup>3</sup> These have been called “balanced,” as in

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<sup>2</sup> Barr and Tagg (1995) used the term “teaching” to refer to teacher-centered, behaviorist instruction, and “learning” to refer to student-centered and constructivist methods; there then followed a great deal of talk about creating “teaching colleges,” without clarifying how to do this. The problem with the Barr and Tagg formulation is that “teaching” and “learning” have conventional meanings; instructors in constructivist classrooms are still teaching, and students in behaviorist classrooms are still learning (one hopes).

<sup>3</sup> To cite John Dewey on this point: In his introduction to *Experience and Education* (1938) he wrote: “Mankind likes to think in terms of extreme opposites. It is given to formulating its beliefs in terms of

balanced literacy programs, or hybrid instruction. Many recommendations about teaching, including the National Academy of Science reviews mentioned below and those aimed at postsecondary instructors (Grubb, 1999, Chapter 1), in effect recommend balanced instruction.

There at least eight reasons to think that more constructivist or balanced approaches are superior to those described as behaviorist. The evidence behind these eight reasons varies enormously: some of it is based on relatively well-specified statistical models, while some is simply the consensus of instructors about what works. Rather than looking for a single kind of evidence providing overwhelming “proof,” whatever that would be, we should recognize that many different arguments support the use of more constructivist or balanced instruction.

First of all, some statistical evidence demonstrates that more balanced instruction, or “teaching for meaning,” increases learning as measured by different test scores.<sup>4</sup> My own work, based on NELS:88 data (Grubb 2008; 2009), indicates that learning in math, science, reading, and history is enhanced by the way teachers use time, is depressed by conventional teaching and increased by more balanced teaching, and is enhanced when teachers have more control over the curriculum; placement in vocational, general, and remedial tracks — where teaching is more likely to be behaviorist and teacher expectations likely to be lower — depresses all test scores as well as progress through high school. Research by Newmann, Bryk, and Nagyoka (2001) on Chicago elementary schools indicates that more balanced instruction increases test scores on both basic skills tests and more comprehensive tests — so constructivist approaches do not cause students to do worse on the all-too-ubiquitous basic skills tests.

Second, only those K-12 schools that have changed instruction have managed to improve test scores — again, as distinct from other outcomes like progress through schooling, or attitudes and aspirations (Grubb, 2009, pp. 71–72). Similarly, the highest-improving elementary schools in Chicago were distinguished by instructionally-oriented leadership, by a coherent instructional guidance system, and by student-centered learning (Bryk, 2010; Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010). When we see schools (and colleges) improving learning and test scores, it is often the result of a shift toward more balanced instruction.

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Either-Ors, between which it recognizes no intermediate possibilities” (p. 17). In discussing traditional and progressive pedagogies, he lamented that “the problems are not even recognized, to say nothing of being solved, when it is assumed that it suffices to reject the ideas and practices of the old education and then go to the opposite extreme” (p. 22) — in effect calling for balanced instruction.

<sup>4</sup> See Grubb (2009, Chapter 2), or Grubb (2008); Raudenbush, Fotiu, and Cheong (1998); Goldhaber and Brewer (1997); Elliott (1998); Knapp (1995); Newmann et al. (2001).

Third, the National Academy of Sciences has undertaken numerous reviews of the enormous empirical literature on instruction, including research on reading difficulties among young children (Snow, Burns, & Griffin, 1998); a companion volume aimed at parents, promoting success in reading (Burns, Griffin, & Snow, 1999); a report on the teaching of math (Kilpatrick & Swafford, 2002); a summary titled *How People Learn* (Bransford, Brown, & Cocking, 1999); another titled *How Children Learn*, summarizing vast amounts of research on learning in math, science, and history (Donovan & Bransford, 2005); and a report on engagement and motivation in high schools, a volume with substantial implications for learning in community colleges (National Research Council [NRC], 2004). All of these clarify not only the importance of instruction — even to issues like motivation and engagement that are often thought to be characteristics of *students* — but more specifically the centrality of balanced instruction, for example by combining specific “skills” (phonemic awareness, mastery of mathematical procedures) with efforts to understand and communicate through text and through a conceptual understanding of mathematical approaches and procedures. These reports generally depend on empirical research in small settings, not one of which can be considered “proof,” but the consistency across studies adds to the evidence for balanced instruction.

In particular, the review of engagement and motivation (NRC, 2004) outlines several recommendations for engaging instruction. Students are more likely to be motivated in programs with close adult-student relationships; where they have some autonomy in selecting tasks and methods; where they can construct meaning, engage in sense-making on their own, and play an active role in learning; in well-structured educational environments, with clear purposes, a challenging curriculum, high expectations, and a strong emphasis on achievement; when students have multiple paths to competence; and when students can enhance their understanding of school and its relation to future goals. But most teaching in basic skills, especially the remedial pedagogy described below, does not look like this. To move to more engaging instruction, more balanced approaches are necessary.

Fourth, a review of the evidence on the effectiveness of professional development clarifies the importance of sustained work on pedagogical content knowledge (Little, 2006). This is the application of general pedagogical approaches (e.g., use of more complex questioning, problem-based learning, student-centered procedures) to specific subjects like math, business, or automotive repair (Shulman, 1987). It requires an integration of *both* content knowledge *and* general pedagogical knowledge, rather than viewing strong instruction as dominated by one *or* the other.

Fifth, in community colleges, most instructors believe in balanced approaches to instruction. As one instructor described her class:

It's very student-centered: It's more bottom-up than top-down, because I try to have meaning drive what they're doing. Although we have to do a drill, time is so precious that I'd rather have them do more writing and talking than worksheets. (Grubb, 1999, Chapter 1)

Instructors may not teach in the ways they espouse — their teaching is often more teacher-centered than they say they would like — but over time, through trial and error, many instructors move from behaviorist to more balanced instruction.

Sixth, while community colleges have many well known examples of innovation, they can all be undermined by conventional and unimaginative teaching. For example, learning communities — one way of contextualizing instruction — lack coherence when two (or more) instructors vary in their instructional approaches; the efforts to teach basic skills (including ESL) in the context of an occupational subject can be as drill-oriented as any “academic” version of basic skills. As one instructor in a pairing of basic reading with Introduction to Computers related, “It’s hard working with another instructor locked into a lecture format — horrible because lectures don’t reach ‘new students.’”<sup>5</sup> If instructors in such paired courses neglect to consult with one another, the result is, once again, two parallel courses without integration. In many ways the *structure* of instruction — the attempts to create learning communities or paired courses, the various mechanisms of acceleration — may improve the conditions for better instruction, but without specific attention to instruction itself, an innovative structure may not enhance learning at all.

Seventh, by definition, basic skills instruction pays attention only to those mathematical and linguistic capacities that are considered basic, and not to conceptual abilities, including those cited by Conley (2007) as part of college readiness, or to “higher-order” or “21<sup>st</sup> century skills” like problem-solving abilities or communications “skills.” When developmental classes confine themselves to basic skills, they do a poor job of preparing students for college-level courses,<sup>6</sup> or for transfer to four-year colleges. Indeed, shifting the terminology of remediation from “developmental” education to “basic skills” instruction is a step backward, as the term developmental education implies improvement on many dimensions of cognitive ability, not just basic skills.

Eighth, in the specific area of basic skills instruction, most students (excepting immigrant students) have been taught by behaviorist methods for 12 or 13 years of formal

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<sup>5</sup> See the review of innovative practices in Grubb (1999, Chapter 7), presenting both positive and negative examples of innovative practice.

<sup>6</sup> See especially Cox (2009), with her description of students who believe that learning means information transfer and mastery of sub-skills, while instructors are looking for more conceptual and analytic abilities. Similar evidence has emerged in our current study of 13 California colleges.

schooling.<sup>7</sup> Given these conditions, it seems inappropriate — daft might be a better expression — to try still one more round of traditional teaching. To be sure, students in community colleges may be more motivated to learn than they were in earlier grades as they confront the challenges of adulthood. Otherwise, however, it seems absurd to try the same methods when they have failed so many times before. As one department chair defended his belief in group work (which he described as “hands-on”) in place of lecture: “Inside the box didn’t work in high school, so let’s do something else.”

All these arguments indicate that mastering various approaches to instruction and moving away from traditional behaviorist teaching toward more constructivist or balanced teaching will improve outcomes. Of course, this is not always true, because there are many more dimensions of teaching and instructional quality than the traditional/progressive, behaviorist/constructivist divide — in fact, too many to have been empirically validated, so the evidence for them is often taken from the logic of practice. Some dimensions of instructional quality are common to all pedagogical approaches: content mastery; warm and supportive relationships with students; explicitness about the purposes of instruction; clarity in presentation; care in providing the prerequisites for understanding before developing new material; developing checks for student understanding; and using student errors to diagnose how students are thinking (sometimes incorrectly) about a topic. Other dimensions of quality are specific to particular approaches. For behaviorist teaching, the techniques of direct instruction suggest a careful progression of introducing a new topic, presenting it to students, having students practice with guidance (or “scaffolding”), and finally having students work independently. Behaviorist teaching that neglects this progression — for example, instructors who present a new topic or skill, and then move on to the next without scaffolding or independent performance — is likely to leave some students without mastery of the new topic. For constructivist instruction, the efforts to develop student-centered methods can work either well or badly: student groups can be truly cooperative, or they can be dominated by a few students; projects can be engaging and “relevant,” or “academic” and even demeaning when they are too childish; attempts to contextualize an academic competence can either draw on contexts meaningful to students, or only on those that the instructor likes.

In effect, there are multiple dimensions of quality that everyone agrees are important, including dimensions of quality particular to constructivist teaching and somewhat different elements of quality in behaviorist teaching. In addition, balanced instruction requires skill in developing an appropriate mix of behaviorist and constructivist

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<sup>7</sup> The structural reason that most community college students have probably been taught with routine methods is the strong tendency within K-12 education to reserve more conceptual teaching for upper-track and high-performing students, with more skills-oriented teaching for the low tracks and low performing students; see, for example, Powell, Farrar, and Cohen (1985).

approaches, and skilled instructors can usually specify why they move from one to the other. To simplify the options, the landscape of instructional possibilities looks like those in Figure 2 (Appendix A). The x-axis displays the progression from left to right of behaviorist teaching, passing through balanced instruction, toward constructivist teaching; the y-axis describes low-quality to high-quality instruction, though quality in reality is multi-dimensional (and difficult to visualize). Balanced instruction seems, based on the arguments above, more effective than behaviorist instruction, or than extreme constructivist, student-centered instruction; indeed, many of the critiques of constructivism use extreme versions as their targets. High-quality teacher-centered instruction (point A) might be more effective than low-quality student-centered instruction (point F). Figure 2 displays possible combinations of instructional approaches, not their effectiveness; no one has figured out how to measure all the dimensions of instruction included in this figure,<sup>8</sup> and no one can say which of these instructional approaches is most effective. All one can say with any confidence is that movement to the right from extreme behaviorist teaching (the segment A-B) is probably an improvement, and movement to the top (improvements in quality) are surely beneficial. Ideal teaching, like that in the National Academy of Science reviews, might be described along the segment C-D, with high-quality balanced instruction. If instruction is both behaviorist and low quality, at a point like X describing a great deal of the “remedial pedagogy” we have observed, there is obviously a lot of room for improvement to the northeast.

Finally, no one really has a clear idea about the magnitude of instructional effects in community colleges. It is possible that simple dimensions of quality — instructor mastery of content, or the warmth of teacher-student relations — make much more of a difference than subtle variations in student-centered vs. teacher-centered instruction, though the converse may also be true. It may also be true that the nature of instruction pales in significance compared to other dimensions of community college students’ lives, like their employment and familial obligations, or other dimensions of basic skills like the lack of alignment among the elements of the instructional triangle. From my own research with high school data, the effects of different dimensions of instruction are individually small but collectively powerful, so overall the quality of instruction is among the most effective of all school resources. But these are empirical issues for community colleges that no one yet has the data to address. For the moment, what is important is to understand the different dimensions of the basic skills classroom, so that we can better understand which features might be worth reforming.

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<sup>8</sup> The empirical work cited in footnote 6 tends to look only at dimensions of behaviorism to constructivism. There is currently some research in progress, some of it funded by the Gates Foundation, on developing observation protocols to measure dimensions of instruction more precisely.

### **3. Basic Skills Instruction in the Classroom**

By now there is good evidence that basic skills instruction does not work very well. Students who complete a sequence of basic skills courses do better than those who are deemed to be in need of remediation but who fail to complete such a sequence of courses, but too few students entering a basic skills sequence move into college-level or transfer-level courses.<sup>9</sup> The question is, what we can understand about effectiveness by looking inside classrooms, where learning occurs? The results in this section are drawn from a study in progress of 13 community colleges in California, including classroom observations of approximately 140 basic skills classes, interviews with these instructors, and interviews with college administrators in the areas of instruction, basic skills, English, math, ESL, student support, and institutional research. (Appendix B provides additional information on the study.) In this section I present a series of findings about the teaching conditions in basic skills classrooms that can come only from classroom observation; in section 3, I present some results about the institutional decisions of these colleges that influence basic skills instruction.

At the outset, one observation is that basic skills instructors are enormously respectful of their students. They praise their students lavishly, ask about their lives, and seem to know a great deal about them. We have seen almost none of the belittling or demeaning treatment of students that one routinely sees in high schools, or that we have seen in more advanced classes in community colleges.<sup>10</sup> In this sense, basic skills instruction in community colleges rarely becomes the destructive type of teaching that is so demoralizing to watch, and which is likely to push students out of formal schooling.

#### **The Dominance of “Remedial Pedagogy”**

However, the dominant finding is that the vast majority of instruction follows the practices of *remedial pedagogy*, which involves drills and practice on small sub-skills (subject-verb agreement, grammar rules, sentence-level writing, converting fractions to decimals or solving standard rate-time-distance problems) that most students have been taught many times before, in de-contextualized ways that fail to clarify to students the

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<sup>9</sup> On the superior outcomes of students completing a basic skills sequence compared to those who fail to complete, see Bettinger and Long (2009), Bailey, Jeong, and Cho (2010), and my own favorite (because of its transparency) from Miami-Dade College, Morris (1994). On the limited progress of students through basic skills sequences, see Bailey et al., the Miami-Dade figures, Bahr (2010), and Wiseley’s (2010) comparison of contextualized and non-contextualized basic skills math courses.

<sup>10</sup> See especially the discussion of distressed and collapsed classes in Grubb (1999, pp. 218–229). For that work, we kept a list of RBTs (Really Bad Teachers), almost uniformly instructors who belittled their students.

reasons for or the importance of these sub-skills. This has also been called part-to-whole instruction, emphasizing the small parts or sub-skills that presumably are assembled into a whole, which refers to broad competencies like the comprehension of varied texts, understanding of mathematical procedures and thinking, and the ability to write in several genres. In remedial pedagogy these larger competencies rarely are practiced or experienced in any way, so instruction results at best in students mastering small sub-skills. Most computer-based programs used in basic skills and in labs also follow the pattern of remedial pedagogy, simply transferred to a computer screen.

Here is an example of such a class:<sup>11</sup>

*The instructor entered class five minutes early, but didn't interact with students. Right on time the instructor started by saying that the topic of the day (factoring linear equations) is important, but didn't explain why. The instructor commented that students might have forgotten everything because of spring break, but he didn't review what happened before the break or review the sequence of topics.*

*The instructor worked through one example from the text, using the conventional approach of writing the mathematical steps on the board while explaining each step orally. When one student asked "Where did that come from?", the instructor repeated the same explanation. The student did not appear to understand. The instructor then worked a second problem from the text, asked for questions, and responded with short answers. These are IRE questions — inquiry-response-evaluation — rather than questions elaborating on the mathematical issues.*

*The instructor put two expressions on the board for student to factor —  $16z^4 + 24z^2$  and  $12x^3 + 6x^2$  — but without instructions. He circulated and provided individual assistance when asked. Several students in the back appeared to understand and were sharing methods, but other students' questions sounded as if they didn't understand at all. The instructor showed no awareness of the extent to which students did not understand the material. He commented that "we need this skill in order to factor polynomials," but again there was no reason why factoring polynomials might be important.*

*The instructor then shifted to a textbook example of grouping with four-term polynomials. Most of the students did not have the text with them. At the end of this demonstration, the instructor asked, "Everybody*

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<sup>11</sup> The following is taken from current research, detailed in Appendix B.

*understand how it's working?" Without waiting for any responses he said, "So now try it by yourself." He circulated again, and corrected students who had done something wrong, but didn't use such problems to share potential errors or misconceptions with the rest of the class.*

*The instructor then provided an example of algebraic multiplication  $(x+m)(x+n)$ , again without any rationale. One student suddenly complained that instructor was explaining as if she already knew the material; she sounded frustrated, bordering on hostile, and asked him to use different colored chalk. Again, the low-key response was to repeat same explanation, not to ask the student to explain what she did; the student complained that "This used to be fun; it's moving too fast. Show me how you get the answer."*

*The instructor continued to present small algebraic procedures throughout the 2½ hour class, without any break, circulating to provide individual help with getting the right answers, but never using students' questions to examine more carefully what they have understood.*

This class is almost a caricature of what one sees over and over: presentation of a series of small sub-skills, presented without any justification for why such skills might be useful in other contexts. The class itself is calm, with only a few moments of student irritation showing through, but it is also extremely tedious, and a single method — presentation and practice — is used for the entire class. When students ask questions about the procedures, the instructor simply repeats his previous explanation rather than providing an alternative. The instructor periodically asks a formulaic question about understanding, but when students make mistakes, or are obviously guessing, he provides the right answer — rather than engaging in any diagnosis of why students have arrived at the wrong answer. The instructor therefore has no way of understanding whether students are making mistakes systematically — a practice that is contrary to the idea that instructors need to understand students' reasoning in order to correct them (Donovan & Bransford, 2005; Shaughnessy, 1977).

The analogue in writing classes is for instruction to move from sentence-level writing, stressing correctness in grammar, usage, and spelling; then (often in a separate course) to paragraph-level writing, emphasizing a particular form with a topic sentence, two or three sentences of elaboration, and a concluding sentence; culminating with the five-paragraph essay. Reading classes usually emphasize fiction, rather than the broader range of reading that students will encounter in subsequent history or science classes or occupational classes. Instructors often use lower-level questions about simple comprehension, including tricks (e.g., identifying topic sentences, identifying conclusions). ESL is more varied, and

many classes provide extensive opportunities to practice a variety of oral language, reading, and writing, in the model of whole language;<sup>12</sup> but other classes concentrate on spelling, grammar, and the rules and idiosyncrasies of English without worrying much about language use.

Other characteristics of remedial pedagogy include an emphasis on getting the right answer, rather than on any conceptual understanding of why an answer is correct, or how to develop alternative “right” approaches to solving a math problem, writing an essay, or interpreting a reading passage. When instructors ask questions, they often provide the right answer if they do not get responses right away; an alternative is to rely on the same few students to give the right answers and then to move on without checking to see whether other students understand. The emphasis on getting the right answer extends to tutors as well, particularly student tutors; these are typically more advanced community college students who have been successful in college-level courses, but they have little to no training in pedagogy and therefore cannot diagnose how student errors arise, or provide anything more than the correct answers.

Very seldom is instruction contextualized, with no references to how basic reading or writing or math might be used in settings outside the classroom, either in subsequent classes or in the world outside schooling. Math seems to exist for its own sake, and though it is obviously a gatekeeper, rarely are there explanations of why mathematical procedures or mathematical thinking is necessary in occupational or civic settings, or illustrations of how math emerges in daily life. (In one class, the textbook was full of ways that instructors could ask students to collect real-life examples of math use, which might have helped them with number sense as well as with the capacity known as document literacy,<sup>13</sup> but the instructor ignored these elements of the text.) Reading is similarly de-contextualized; students usually read short passages, or short stories, but the variety of reading that students

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<sup>12</sup> We also discovered an example of a bilingual class in place of an ESL class. The class became bilingual because it included a cohort of Spanish-speaking students, the instructor by chance was fluent in Spanish, and department chair suggested making the first class in a sequence bilingual. In many colleges the vast majority of non-English speaking students speak Spanish, and (less often) Vietnamese or Cantonese, so bilingual classes are feasible; and the K-12 research shows bilingual approaches to be much more effective than English-only approaches (Genesee, Lindholm-Leary, Saunders, & Christian, 2006, Chapter 6, supported by many other summaries). K-12 education has developed a wide variety of bilingual approaches to second-language learning, but community colleges use only ESL — another example where the different spheres of remedial education might learn from one another.

<sup>13</sup> Basic skills students often lack number sense, the intuitive understanding of what numbers mean, their magnitudes, relationships to one another, and how they are affected by various operations. Evidently, in watching them transform decimals into fractions, they do not understand place value — i.e., the meaning of 4 and 7 in the number 10.457. Document literacy is the ability to extract meaning from the documents (including numbers) we encounter in daily life like graphs and pie charts, thermometers and other measuring devices, and maps and other geometric depictions; the International Adult Literacy Survey has found enormous variation in document literacy.

might do in occupational or transfer courses is rarely included. There are well developed, contextualized approaches to basic skills, but they tend to be few and far between, and the practice of making linkages between classroom learning and the world outside the classroom is rare.

A difficult issue is the level of demand placed on students. Most writing assignments are one page long; much of the reading consists of a few paragraphs, or one or two pages, and most of the reading is done in class. Instructors are clearly aware of the busy lives of their students, who all work in addition to taking classes, many of whom have families to care for. They also appear to feel that students are fragile, only weakly connected to the educational enterprise, and that imposing too many requirements would cause them to drop out. Unfortunately, these low levels of demand are not preparing students for college-level work, and certainly not for transfer to four-year colleges. One of the enduring problems in remedial classes, therefore, is how to impose adequate demands on students while simultaneously providing the moral and academic support so that they will continue their education.

Other common problems include covering material too quickly without checking for understanding — the basis for the student's complaint in the classroom described above. This is something that often happens in K-12 education, and may explain why so many community college students need basic skills instruction. Many instructors also use humor or short games to lighten the class, but these usually have little to do with fostering understanding. Sometimes instructors circulate to provide individualized attention, but without giving other students anything to do; in these cases, students quickly get bored and restless. So basic instructional techniques are often weak, as one might expect of instructors who have had no preparation in teaching methodology.

## Innovation and the Locus of Innovation

Of course, not all classes follow the practices of remedial pedagogy. In virtually every college, individual instructors develop basic skills classes that use more student-centered methods. For example, in the college with the lackluster math instructor described above, an English instructor taught her writing class in a very different way. Most of the class focused on an unexciting if necessary topic — sentence types (simple, compound, and complex), but the discussion was integrated with references to the overall writing process:<sup>14</sup>

*Class started with a pitch for student submissions to the English Department's essay contest; "We're all amateurs," the instructor noted, "but here's one chance to become a published writer." The instructor*

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<sup>14</sup> The following is taken from current research, detailed in Appendix B.

*handed out flyers on submissions; when a student arrived late, she said jovially, “You’re late; you’ve got to work,” turning over the distribution to the tardy student — and indicating subtly that appropriate student behavior includes punctuality.*

*The instructor then asked a student to summarize a book reading, related to a department-wide common reading. A student then summarized the basic elements of the novel based on her own reading and attendance at the public reading event. “Coming to the readings is part of the college culture,” the instructor explained. “College is where you make life-long friends, become part a community. Don’t just come to class and go home.”*

*The instructor then prepared students for the return of a draft composition at the end of the class. The composition would be included in the portfolio used in determining the student’s final grade; she reviewed the requirement that the paper be typed and use MLA style: “You will need to know this before you get into English 28,” focusing students on the sequence and reinforcing the expectation that they will progress to the next level. She encouraged students to seek help with the format from the lab staff, “and if you are still having problems, come and see me during office hours.”*

*After 20 minutes of fast-paced discussion of several reading/writing forums, the instructor introduced five sentence types and focused on the effect of transition words (and, but, with, etc.) have on the type of sentence. Rather than simply defining independent and dependent clauses, she encouraged student to explain the relationship of clauses to one another in terms of intended meaning. When a student had difficulty, she modeled meta-cognitive questions that the student could answer (“Why do you think the author is trying to say that?”) and complimented students when they got to a correct or acceptable choice.*

*The instructor noted that on the next test “I will expect you to be able to demonstrate you can write each type of sentence so your compositions will have variety,” connecting this sub-skill to the mastery of writing.*

*She then reviewed numerous examples from the textbook on the board, like converting run-on sentences to complex sentences. When a student responded with an incorrect solution, the instructor asked the student to verbalize the choices he or she was making, engaging the class in this*

*meta-cognitive process and producing a lot of chatter among students as they went through the process with the focus student. The teacher “managed” this chatter occasionally when it became distracting; but she also recognized that talk was related to positive student involvement. While this appeared to be a skills-based class on sentence types and transitions, the students appeared to be internalizing the process for using transitions to create meaning: “You have to own those transitions to give your writing its intended meaning.”*

*Later, students broke into groups to work on five sentences reflecting different sentence types. As the instructor circulated, it was clear that she knew every student and was able to connect what they were doing with their past performance. By the end of groups reporting their sentences, students were discriminating between inappropriate, satisfactory, and particularly good use of transition words and phrases. This topic, which is usually mechanical and sometimes baffling to students, had reached a significant level of critical understanding.*

In this class, 50% of time was spent on discussion, compared to no time at all in the math class; the activities were fast-paced and varied over the 1½ hour class; the instructor referred to the purposes of writing and other opportunities for reading and writing, including the writing lab, requirements in subsequent courses, and the essay contest; and students were highly engaged, in contrast to their quiet but unenthusiastic participation in the math class. The instructor had developed her own approach to basic skills, rather than having learned about instructional methods from a teaching program or from professional development. Other notable examples of idiosyncratic innovations included an ESL instructor who converted his class into a bilingual class (see footnote 13) and an instructor who used individual reading logs to identify the specific problems students were having, following up with individualized instruction targeted at these specific problems.

In other cases of innovation, colleges or instructors develop a structure of practice intended to improve teaching. These include efforts to developed linked courses, where a basic skills course is paired or linked with a subject matter course (writing with Introduction to Psychology, for example, or ESL with a computer course), so that basic skills can be taught with the examples and requirements of subject matter in mind — one form of contextualizing basic skills. Sometimes basic skills courses are included in learning communities, where students take three or four courses together — for example, a basic math course, a basic reading/writing course, and an introductory biology course necessary for health sciences. This is again a way of contextualizing basic skills — *as long as* the instructors jointly plan their courses, which does not always happen. Contextualizing basic skills courses is widely supported by those who have tried it or examined it (Perin, 2010),

and there is even a little evidence that it works. Using longitudinal data from California, Wiseley (2010) found that students taking a basic math course linked to career and technical education (CTE) were more likely to pass the course and enroll in and pass subsequent courses, than were those in conventional basic math courses; somewhat surprisingly, virtually all of the benefits were seen in African American and Latino students. However, he found only 10 such courses among the 35 colleges that responded to his questionnaire, so the practice is quite rare (at least in California).

Other innovations include programs designed for particular groups of students: programs for African American males, for example, or for Latinos (including the Puente program in California), or for older individuals (mostly women) returning to college (the PACE program). These programs sometimes provide readings particular to the groups they serve, or opportunities to investigate issues of racial and ethnic identity; they provide same-race (or same-gender) support to groups of individuals as well.

Some colleges have been trying to accelerate basic skills sequences, since the sequence of basic skills courses can be discouragingly long. (Colleges often have three or more courses in reading, in writing, and in math; ESL sequences can include five or six courses; and in one college, students who finish an ESL sequence then have to start the basic reading/writing sequence — an endless series of remediation!) Acceleration involves intensifying coursework — for example, taking four basic skills courses at a time, or attending courses for six or eight hours a day instead of three — so that it can be completed in a shorter period of time and minimize the potential problems in moving among courses. But acceleration does not necessarily mean moving away from remedial pedagogy, and a faster sequence of mediocre teaching can still be harmful.<sup>15</sup> It is not yet clear whether acceleration improves progress through basic skills sequence, though several California colleges have developed somewhat convincing evidence (Hern, 2010).

In a few colleges, English departments, ESL departments, or (less often) math departments have organized themselves, developed their own non-remedial approaches to instruction, and then have ensured that these approaches persist through a combination of professional development and careful selection of instructors (including adjunct instructors). Like the English teacher whose class is described above, the classes we observed in these departments are much more engaged in discussion rather than lecture, and much less focused on sub-skills to the exclusion of more important college-level competencies. The conditions that lead departments to innovate are unclear — we will

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<sup>15</sup> In the 1980s, Henry Levin proposed that K-12 schools “accelerate” rather than “remediate” students who had fallen behind, and a number of Accelerated Schools developed. However, what acceleration meant in this case was the practice common in upper-track courses — that is, more constructivist and conceptual pedagogies — and not just speeding up coursework, so that any analogies between Accelerated Schools and acceleration in community colleges are misleading.

return to these departments in 2010–2011 academic year to see if we can identify these conditions — though they surely include some combination of leadership, consistency in the perspectives of department members, access to resources including release time, and the lack of any overt barriers (including administrative opposition).<sup>16</sup>

Some instructors are also experimenting with curricula drawn from K-12 education. For example, several California colleges are using Reading Apprenticeship, an approach developed at WestEd in San Francisco for middle and high school students. A variety of experiments with alternative math curricula are also being tried, some drawing on the National Council of Teachers of Mathematics *Standards*. These innovations often have the advantage of research behind them, and they avoid remedial pedagogies. Whether they can be successfully modified for the great variety of community college students (described below) remains to be seen.

However, in the 13 colleges we have examined this past year, the locus of innovation has always been the department or the individual; it has never been the institution. This is not universally true, of course; we do know that some community colleges, led by instruction-oriented administrators with the cooperation of faculty, emphasize the quality of instruction, and use all institutional mechanisms at their disposal to improve the quality of instruction.<sup>17</sup> But these examples are relatively rare; in general, instruction remains the responsibility of the faculty while the administration focuses on management and administration. If faculty are unable to organize improved approaches to instruction, they do not happen.

## **Students and the Complexity of the “Remedial Problem”**

From one perspective, the problem of remediation seems simple: some students lack mastery of certain skills; they take a course or two and proceed to college-level work. But from observing classrooms, it becomes clear that most basic skills classes are quite heterogeneous. Based on observations so far and from instructor comments about students, at least seven different kinds of students may show up in any basic skills class:

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<sup>16</sup> The pattern of individual departments developing innovative disciplinary approaches also emerges in K-12 education; see, for example, the math departments profiled in Boaler and Staples (2008) and Gutiérrez (2000). Many schools are now trying to replicate the process of creating such coherent departments in the form of Professional Learning Communities (e.g., DuFour, DuFour, Eaker, & Karhanek, 2004). The intentional creation of PLCs almost always requires the participation of leaders, including principals, assistant principals, or teacher-leaders, something that community colleges could do only if their presidents, deans of instruction, or department heads acted as instructional leaders.

<sup>17</sup> See, for example, Grubb (1999, Chapter 8) on the institutional influences on teaching, especially pp. 310–318 profiling 3 colleges (out of 32 observed) that appeared to be exemplars of “teaching colleges.”

- (1) “Refresher” students, who learned basic academic skills so long ago that they have forgotten how to apply them, and who need only a quick refresher course to recall these skills. Faculty often guesstimate that about 10% of students are refresher students.
- (2) Students who have mastered the basic skills on assessment tests, but who are poor test-takers, or who simply did not bother to treat the test seriously. Some students may miss only one or two elements of an assessment but are still sent to basic skills classes rather than to more individualized forms of remediation.
- (3) Students who never learned basic skills, either because they were poorly taught or because they missed a great deal of schooling. Particularly in urban community colleges, students who come from low-quality urban schools are able to progress through the grades without learning much, as long as they behave themselves, and high school exit exams — often written at the seventh or eighth grade level — do not guarantee adequate preparation for community college coursework. Other student miss schooling when they move, if they have chaotic living arrangements, if their parents are inattentive (as happens with parents incarcerated, with alcohol or drug abuse or mental health problems, or with single mothers with too many responsibilities), or when they are mistreated in school and quit attending. It is nearly impossible to know why some students have missed so much schooling, but it is reasonably clear that many have.
- (4) Some students participate erratically. They may miss a lot of classes; others come late and/or leave early; others spend a great deal of class time texting or eating, or leave class for phone calls. The diagnosis of what is going on varies widely: many faculty members blame students and their lack of preparation for colleges — “they don’t know how to be students” — though the lack of engaging instruction, in classes dominated by deadly-dull remedial pedagogy, is a strong alternative explanation. Some instructors — as with the writing class described above — let students know what behavior is inappropriate, but most tolerate such behavior without comment, thereby legitimizing behavior they consider to be inappropriate.

A special form of lackluster participation comes from students who have been mistreated in their earlier schooling.<sup>18</sup> As one instructor mentioned, “They’ve had pretty bad experiences in school. They don’t trust the classroom. They don’t trust the teacher. It never works out the way anyone says.” Colleges sometimes create special elements within “student success” courses to address these perspectives, or create learning communities — for African American males, for example — so that students can analyze their common experiences. But without understanding students’ backgrounds, individuals who need better assurances about the promises of schooling may appear simply to be unmotivated and inattentive.

- (5) Some students appear to have learning disabilities, or more pervasive developmental delays. While special education in K-12 includes methods of assessment, these are weak to non-existent in many community colleges, and so learning disabilities go undiagnosed and untreated.
- (6) Some students have mental health problems that prevent them from working very hard, or attending classes consistently. Instructors can identify some of these; one mentioned the prevalence of post-traumatic stress syndrome because of violence in the community. However, most colleges have few mechanisms of diagnosis and treatment, unless they have special access to community mental health facilities.
- (7) Immigrant students are often misplaced into basic skills classes designed for native speakers; occasionally native-born students find themselves in ESL classes.

In our observations and interviews we are trying to disentangle the different causes of students’ difficulties, because only then is it possible to determine what solutions might be devised. From students’ autobiographies or educational histories it is clear that many students have been mistreated by their parents, and some by their peers or other members of the community. Still others have been badly treated by teachers and administrators in their K-12 education, causing the mistrust of formal school mentioned above. Instructors may face all these kinds of students in one classroom, and they have only two instruments at their disposal: their approaches to instruction, which can vary from deadly dull to engaging, and their personal relationships with students, which in general are quite sympathetic but

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<sup>18</sup> On the evidence on mistreatment as an explanation for some of the achievement gaps in high school, see Grubb (2009, Chapters 4 and 9).

certainly not up to the task of treating mental health issues or learning disabilities. So the variety of students undermines the ability of instructors to meet their needs for basic skills, never mind other needs.

## Student Support

Everyone recognizes that the lives of community college students — unlike those in research universities or elite colleges — are incredibly busy, with employment and family responsibilities, the demands of coursework, and with very little parental support available. One solution has been to devise support services for students and then to integrate them with basic skills instruction. Student support largely means guidance and counseling, which is largely academic counseling about the courses necessary for graduation or transfer (Grubb, 2006); supplemental instruction, including classes like Student Success in “how to be a student;”<sup>19</sup> and tutoring, labs for writing, math, and ESL, and other academic support for those in basic skills classes. Some colleges have stressed student support as the main way the college is trying to strengthen remediation; providing more peer tutors or training for tutors is a common strategy. But if a central problem in basic skills is mediocre teaching following “remedial pedagogy,” improving tutoring sidesteps the crucial issue while pretending to do something to strengthen basic skills.

However, support services in public community are usually limited, particularly compared to those in the best private trade schools (Rosenbaum, 2001); they are usually the first activities to be cut in financial crises like the present. Basic skills instructors often complain about counselors and their lack of familiarity with assessments and course sequences, and particularly about the ability of counselors to override the results of assessments. Tutoring and basic skills labs seem helpful: they may provide more help for students who are struggling the most, a practice related to the “continuum of services” idea in social services and Response to Intervention in K-12, though in practice many faculty maintain that the students most in need of help do not show up in labs. But much of the time they replicate the pattern of remedial pedagogy — particularly in the tendency of tutors to help students get the right answers — and they are usually not well connected to primary instructors: only a few instructors direct students to labs and workshops for specific purposes, and instructors almost never receive information back from these support services. The most serious problems students face — inadequate employment and income, and family responsibilities including stable child care — are beyond the ability of most colleges to correct. Overall, then, it is not clear how helpful student support services are.

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<sup>19</sup> See Zeidenberg, Jenkins, and Calcagno (2007) for some evidence on the effectiveness of student success courses.

## 4. Institutional Influences on Instruction

As Figure 1 (Appendix A) clarifies, the classroom and the “triangle of instruction” exist within institutional and policy contexts, and our case studies of 13 colleges have been designed to help us learn about these institutional influences as well as about classroom practices. Many of these institutional influences — too many to review here — affect the “triangle of instruction,” and a few of them illustrate why it may be particularly difficult to improve the quality of teaching in community colleges, including teaching in basic skills classes. Some of these factors are:

- Community colleges do not generally require pre-service preparation in instructional methods as K-12 education does, and therefore any instructional improvement must depend on professional development (PD). But PD in California colleges is particularly poor: colleges offer “flex days” where faculty attend workshops of their own choosing, with most subjects unrelated to instruction. Workshops include such topics as CPR, creating retirement accounts, tips for vacations, and the initial day of the college where the president introduces new faculty and programs. Adjunct faculty rarely attend, because they are paid only for teaching. Some exceptions include one college with professional development specifically for adjuncts; in other cases, instructors have developed faculty inquiry groups,<sup>20</sup> a potential form of PD.

With these few exceptions, community colleges in our sample have no systematic ways of improving the quality of instruction, either in basic skills or in any other courses. Elsewhere, colleges have developed ongoing forms of professional development; support and mentorship for new faculty; teaching and learning centers for instructors (rather than for students); funding to establish pilot courses and non-traditional teaching; hiring and promotion practices emphasizing the quality of instruction; merit pay systems linked to instructional improvement — so colleges have many possible ways of improving teaching (Grubb, 1999, Chapter 8). But these appear to be rare, and they were certainly absent in the 13 colleges we observed.

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<sup>20</sup> The practices of Faculty Inquiry Groups (FIGs) developed out of the Strengthening Pre-collegiate Education in Community Colleges project at the Carnegie Foundation for the Advancement of Teaching (see Carnegie Foundation for the Advancement of Teaching, 2008). The problem with FIGs funded by outside money is that many of these collapse as soon as the outside funding ends, unlike the well-organized English and math departments we saw, which depend not on external funding but on internal motivation and accountability for their coherence.

- The bureaucratic procedures of some community colleges inhibit innovation. In some colleges, faculty efforts to develop innovative courses have run into problems because they did not fit into the college’s course structure; many colleges have an endless sequence of committees that have to approve innovations, each of which has veto power. Registration procedures are part of the problem, especially for linked courses and learning communities; counselors unfamiliar with innovations may not refer students to them.
- Territoriality around money, faculty positions, and other resources makes it difficult to depart from the status quo. When the allocation of full-time faculty is established, then departments come to view these resources as “theirs;” then, in order to fund innovative efforts, department chairs have to be willing to give up some of “their” funding, making innovation a negotiation of personal sacrifice rather than an institutional decision. Under these conditions it is easier to innovate with outside money, from foundations or categorical grants; but the flow of outside money is likely to end without making any institutionalized changes, which causes those programs that are funded in this way to be regarded as marginal to the college.
- As in virtually all educational institutions, community colleges are wedded to the “batch processing” of students in courses. When students fall below a cutoff point on a basic skills assessment test, they are directed to the appropriate course in the basic skills sequence, even if what they lack is a specific skill that does not require a semester-long course (or a three-semester sequence of courses) to master. The alternative — which several instructors in our sample of colleges have developed, and which colleges in Virginia appear to have adopted by replacing math courses by one-credit modules<sup>21</sup> — is to use an assessment to diagnose what skills students lack, and then to teach (or re-teach) only those skills that a student is missing. Individualized remediation is particularly appropriate for “refresher” students, and it might be able to detect the differences among the seven types of students identified above. But without a more individualized approach, some students spend time in classes they neither need nor want.

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<sup>21</sup> See the Developmental Mathematics Redesign Team, *The Critical Point: Redesigning Developmental Mathematics in Virginia’s Community Colleges*. This has just been passed by college presidents, and it remains to be seen how individual colleges will implement this design.

- The basic skills curriculum in community colleges is a *sequence* of events, not a single course. Students take an assessment test; based on their score — and occasionally on other measures — they are assigned or counseled into a particular place in the math, reading/writing, or ESL sequences; and ideally they progress up this sequence until they arrive at the first college-level course. But alignment among all the activities in the sequence may be missing: the assessment may not correctly identify who needs course 1, course 1 may not adequately prepare students for course 2, the sequence may not prepare students for the demands of the first college-level course. In the absence of mechanisms to assure alignment, there may be false positives and false negatives up and down the sequence: students who don't need course 1 but are counseled into it, students who do need a particular course but manage to evade it, students who pass a particular course but still do badly in the next course in the sequence, and so on. The lack of alignment creates problems in instruction because any basic skills class includes students who are underprepared for that class as well as overprepared or “refresher” students; without the techniques of differentiated instruction, the instructor teaching to the middle of the class cannot identify any of the misplaced students.

There are only three basic ways of assuring alignment among tests and courses: having a set of external standards that specify what material is taught in which order, as happens (in theory) with K-12 state standards; adopting an entire curriculum with an initial assessment and a series of textbooks that are aligned with one another, and then with a college's standards in its college-level courses; or substantial discussion among faculty to align courses, including such devices as common exams to assure consistency among different instructors (particularly important if many instructors are adjuncts). But states have not created standards for community colleges; the appropriate series of tests and textbooks do not exist, especially since instructors usually choose their own texts; and in most colleges, extensive discussions among instructors do not take place.<sup>22</sup> (The important exceptions are the English and math departments, mentioned in the prior section, that have organized themselves to improve instruction, and have in some cases adopted common exams to assure uniformity among courses.) The result of non-

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<sup>22</sup> In addition to evidence from our 13 colleges, see also Safran and Visher (2010) on the lack of alignment between assessment tests and placement of students in developmental courses.

alignment is a series of inappropriate placements and faculty complaints: students unprepared for certain courses in the remedial sequence, or particularly wide gaps between courses, or students over-qualified for a course because they lack only a particular skill; and students who pass into college-level courses unprepared.

- Community colleges use huge numbers of adjunct or part-time faculty to teach basic skills, because of the flexibility and lower costs of adjuncts.<sup>23</sup> But these individuals are often chosen at the last minute, typically with the requirement of a master's degree in the subject they will teach but no attention whatsoever to instructional approaches; only rarely do colleges provide any mentoring or support for new adjunct faculty. Adjuncts are usually hired and organized by a few full-time faculty, but if full-timers are missing there is no one to supervise adjunct faculty either. (One college we observed had virtually no ESL courses because a vacancy for a full-time ESL instructor had gone unfilled, so there was no way to hire the adjunct faculty who might have offered courses for the burgeoning immigrant population.) Because they are paid for coursework only, adjuncts tend not to participate in professional development, in innovations like learning communities, or on faculty committees. Thus, voices from basic skills classrooms are often missing from the college's governing structures. Everyone bemoans the large number of adjuncts with weak institutional connections, but most colleges have done little about the problem, including most of our sample, excepting one college with a small amount of professional development for adjuncts.
- There is no real instructional leadership in most colleges that might create a vision for basic skills and for priorities in innovation. Occasionally an administrator becomes a de facto instructional leader; in one college, for example, an assistant dean of instruction played a particular active and collegial role in the college's basic skills committee and in promoting innovations. But otherwise, administrators defer to faculty, and seem fearful of treading on the "rights" or the academic freedom of faculty. The result is that individual faculty

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<sup>23</sup> It is also difficult to contact adjuncts, partly because they are not paid for extra work (like interviewing with researchers); we were largely unsuccessful in trying to observe and interview adjuncts. I have previously estimated for two colleges that adjuncts cost between 40% and 43% of what a full-time faculty member does, per course taught. These results depend on college-specific pay and benefit schedules, and probably range between 35% and 50%. See Grubb (1999, pp. 331–332, footnote 10).

develop their own experiments and innovations; some colleges are full of “little programs” championed by one or two faculty, or a couple of linked courses or learning communities initiated by like-minded faculty. At one college, faculty spoke of the “ATM model” of receiving small grants for small-scale innovations; at another college, individual faculty responded to funding from the state’s Basic Skills Initiative — “things happen with *little* pots of money” — but there were no institutional or departmental responses.

The problem with “little programs” is that they cannot be consistent or coherent, and they usually cannot be institutionalized. They tend to come and go with faculty interest, or external funding; a few students receive the advantages of a learning community, or an experimental approach to math, or a class based on reading apprenticeship, but the vast majority of students do not; there is no way to cobble together these “little programs” into coherent sequences of courses; and it becomes difficult for students (and counselors) to learn about these “little programs.” Colleges often point to them with pride, as evidence that they are innovating, but in most cases they only add to the incoherence of the college.<sup>24</sup>

- Data and institutional research are quite weak in most colleges — so the goal of “data driven decisions,” popular in both K-12 education and in the Achieving the Dream initiative from the Lumina Foundation, is impossible to carry out. In some colleges, data is maintained in different databases, and putting them together is difficult; in other cases, institutional researchers are overwhelmed with routine reports and public relations efforts for the president. In 3 of our 13 colleges, the president or chancellor had recently fired their institutional researchers; while fiscal conditions may have been to blame, many instructors thought that the administration did not want the bad news about student progress to be publicized. In the absence of data and some analytic capacity, however, no one could answer simple questions about progress through and stumbling blocks in the basic skills sequence; the possibility of evaluating the effectiveness of innovations — as Wiseley (2010) has done in comparing contextualized vs. non-contextualized math courses, for example — does not exist.

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<sup>24</sup> Evidence from K-12 education indicates that coherence improves the effectiveness of a school; see Newmann, Smith, Allensworth, and Bryk (2001). In my vocabulary, coherence is an abstract resource that does not cost money but does enhance outcomes.

## 5. Emerging Recommendations

Now it becomes clearer why basic skills instruction in community colleges — like most second-chance options in our educational system — is not particularly effective. The majority of teaching is mediocre, following the practices of “remedial pedagogy” and ignoring the substantial evidence that constructivist or balanced teaching would be more effective. Conventional teaching also violates almost all the norms for engagement and motivation. Innovations are numerous and promising, but there are too few of them, and they are not systematic or institutionalized. Alignment and articulation along the sequence of remedial courses is virtually non-existent; and the variety of students within basic skills classrooms, and undiagnosed student needs, make it difficult for instructors to address all of them. Furthermore, the institutional influences on remedial coursework and instruction are limited and sometimes counterproductive, so that even those innovative instructors, or departments that try to initiate department-wide reforms, are provided with little support.

The need for basic skills instruction is almost surely here to stay. In the absence of a coherent national effort to reshape K-12 education and prevent the need for so much remediation,<sup>25</sup> increasing numbers of students are likely to leave high school without mastering basic skills, no matter how they are defined. The country will continue to receive large numbers of immigrants of all ages in need of ESL or bilingual education. As such, unless community colleges want to be simply a filtering mechanism, eliminating all students who have not mastered basic skills, they will need to improve basic skills instruction and the institutional support that such improvements require. The results detailed in this paper suggest at least five large-scale recommendations:

- (1) Community colleges are often quite fragmented institutions, with isolated faculty going about their business, adjunct and full-time faculty rarely meeting, and faculty and administrators living in different worlds with different incentives. In this environment, the quality of instruction is usually low in the hierarchy of priorities (“What are you talking to me about [instruction] for, because I have other things to do,” as one instructor described his faculty’s reaction), and basic skills is a low status mission. But successful colleges focus all of their efforts on instruction, and use all of the institutional mechanisms at their disposal

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<sup>25</sup> Thinking of ways to prevent the need for so much remediation seems attractive. For example, the California State University system has adopted the Early Assessment Program, a test that high school juniors take to let them know if they are ready to enter the CSU system without the need for remediation, and one of the colleges in our sample has similarly been providing their basic skills assessment to high school students. But prevention of remediation probably requires a fundamental reshaping of K-12 education; for glimmers of what this might look like, see Grubb (2010).

to improve instruction. In K-12 education, those schools that have managed to reform themselves usually have administrators who are first and foremost *instructional* leaders, rather than managers or political representatives; faculty who cooperate with leaders in establishing a sense of *internal accountability* (Carnoy, Elmore, & Siskin, 2003), with all members of the community accountable to one another and to students; and leadership *distributed* throughout the college rather than being held by the president and exercised in top-down fashion (Spillane, 2006). While this approach has been best articulated for K-12 schools, there are glimmers of it in the community colleges we have observed: in the commitment to colleges as teaching institutions, and the selection of faculty into teaching rather the research universities; in the dedication of instructors to their basic skills students; in the efforts of several departments to create internal accountability and a coherent approach to basic skills; in the few administrators who have participated actively with faculty to create innovations, acting in ways consistent with distributed leadership; and in the many individual innovations that, even though they are often fragmented, testify to the dedication of many instructors to find better approaches. If these elements could be reinforced and extended, for example by administrators acting as instructional leaders, then community colleges could indeed become the “teaching institutions” they pride themselves on being.

- (2) As part of being a teaching college, all instructors (and tutors) in community colleges, but surely those in basic skills courses, need some preparation in the instructional approaches appropriate for the courses they teach. This can be done through pre-service programs; in sustained programs of professional development focusing on instruction, including all adjunct faculty; and in the individual mentoring or coaching of instructors by master teachers as part of promotion and tenuring.
- (3) Community colleges as institutions need to exert more leadership on instructional issues, including the particularly difficult issues in basic skills, to create more effective and coherent instructional approaches and better alignment. There are many ways of doing this, described in Grubb (1999, Chapters 8, 9) and many other materials on contextualized teaching, learning communities, and teaching-learning centers. Otherwise reforms will continue to be idiosyncratic and isolated, and improvements will be dominated by disconnected “little programs” for a

few students and faculty. This does not mean, of course, that college administrators should impose particular approaches or curricula on faculty, as K-12 districts have sometimes done by requiring scripted curricula. It means instead some kind of shared responsibility for developing effective approaches and making them consistent and coherent, in the pattern sometimes described as distributed leadership (Spillane, 2006).

- (4) Colleges need to consider more individualistic approaches to basic skills instruction, in place of or in addition to the “batch processing” that now dominates coursework. More individualized approaches could detect cases where students need further work on just a couple of skills; they could also diagnose problems like learning disabilities and mental health issues that impede learning. It is possible that computer-based approaches — similar to computer-adaptive testing — might be able to individualize instruction, through a process of continuous assessment and revised instruction — though most existing computer-based programs currently replicate the dismal practices of remedial pedagogy.
- (5) States, and potentially the federal government, can play important roles by providing grants to enhance basic skills instruction. In California, the Basic Skills Initiative caused many of the colleges we profiled to convene a Basic Skills Committee to figure out how the money should be allocated. While some of these colleges simply spent money on existing practices, or on the president’s favorite initiative, other colleges were able to have sustained, college-wide discussions about improved approaches to basic skills. Where states have targeted such funds on well-considered specific practices — like Washington State with the I-BEST program, a method of integrating basic skills with CTE — a program of innovation, experimentation, evaluation, and further refinement can develop, something that is impossible when colleges are left on their own to decide how to use state (or federal) money.

Of course, several of these recommendations cost money, and the current fiscal crisis is probably not the best time to propose reforms requiring additional funding. But changing instruction and improving the institutional climate for innovation are reforms that cost less money than they do other resources like vision, persistence, leadership, faculty cooperation, and instructional capacity.<sup>26</sup> And if basic skills courses continue as they are

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<sup>26</sup> For more detail about this argument, for example the idea that some effective resources require money but many do not, see Grubb (2009).

currently taught, with relatively few students moving into college-level coursework, then virtually all resources in basic skills are being wasted.

We as a nation and colleges as institutions have little choice but to invest these additional resources over the coming years. Otherwise, too many students will be unable to make progress in their educational plans, and the ideals of community colleges as "teaching colleges," will be empty.

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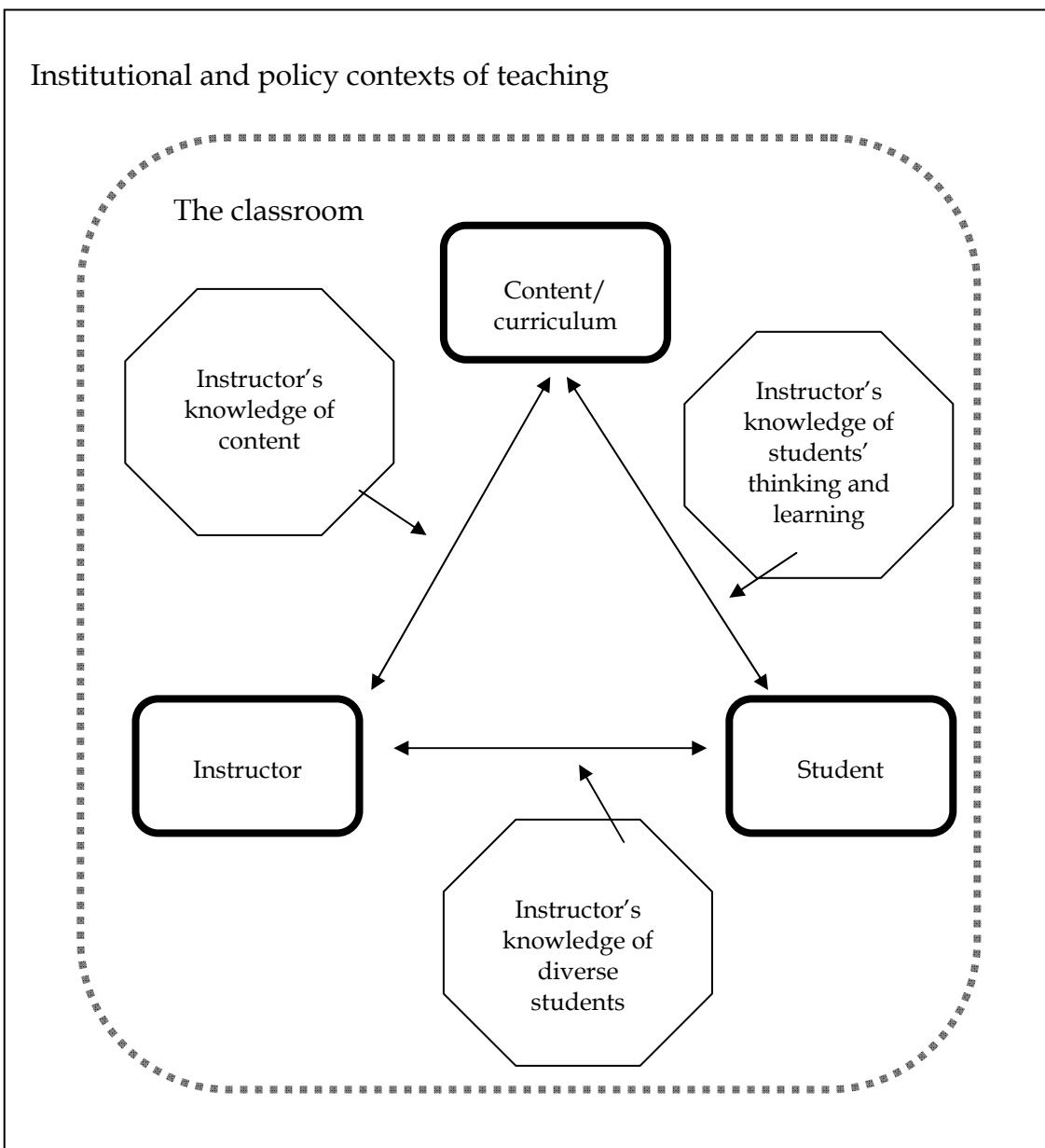
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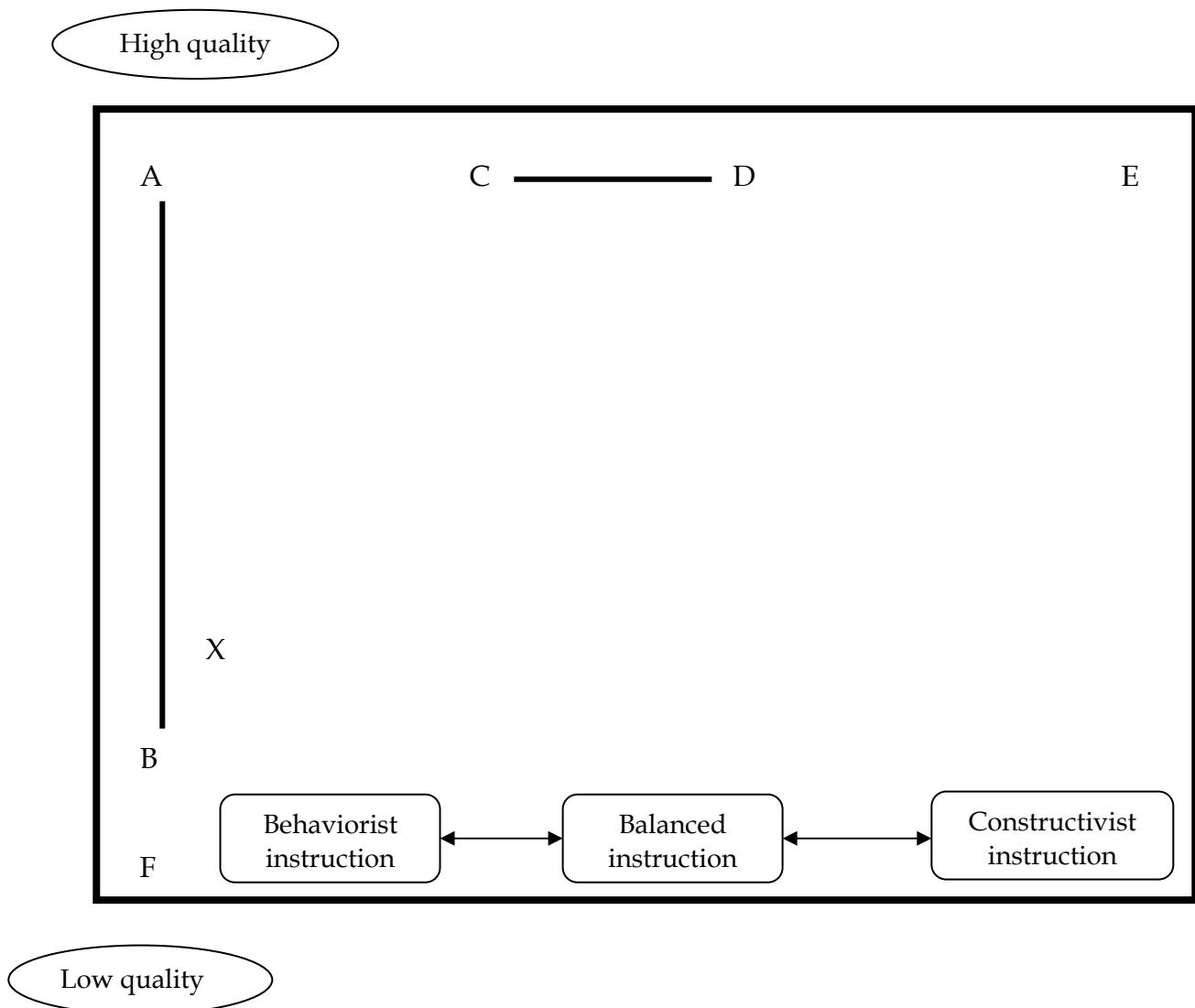
## Appendix A: Figures

**Figure 1: The Instructional Triangle**



SOURCE: Little (2006) based on Lampert (2001).

**Figure 2: The Landscape Of Instructional Approaches**



SOURCE: Little (2006) based on Lampert (2001).

## **Appendix B: The UCB/RP Study of Basic Skills in California Community Colleges**

The study of basic skills reported in this paper is being carried out under my direction, with researchers from UC Berkeley (Liz Boner, Kate Frankel, Lynette Parker, and David Patterson) and from the Research and Planning Group of the California Community Colleges (Bob Gabriner, Laura Hope, Eva Schierring, Bruce Smith, Richard Taylor, Ian Walton, and Smokey Wilson). It is funded by the Hewlett Foundation as part of a portfolio of grants to investigate and improve basic skills instruction in California Community Colleges.

The overall design follows approximately that developed for Grubb (1999), except that the previous study encompassed all areas of instruction (including 42 basic skills or developmental classes) while the current study focuses on basic skills only. The basic structure of interviews with administrators, and observations of and interviews with instructors, is intended to provide information on both the institutional and the classroom dimensions of the “instructional triangle” in Figure 1.

During the 2009–2010 academic year, we carried out case studies of 13 colleges. The empirical research includes interviews with administrators including the dean of instruction, the dean of student services, any associate deans of student services including counseling or supplemental instruction, any dean of basic skills or developmental education or the head of the Basic Skills Committee; the chairs of math, English, and ESL departments; and the institutional researcher (if any) of each college. These interviews are intended to describe the institutional decisions about basic skills instruction, including the use of college funds, responses under California Basic Skills Initiative, the provision of student support for basic skills services, any approaches to instructional improvement, and any research about basic skills.

We then had colleges to provide us with names of instructors in reading, writing, math, and ESL, and attempted to observe and interview approximately 16 instructors in each college, where possible observing for two classes and then interviewing each instructor about issues like their approaches to instruction, the reasons for students enrolling in basic skills classes, the college’s decisions about basic skills and support for instruction generally, and influences on the instructor’s approach to teaching. While we have tried to get colleges to provide us with lists of instructors from which we could choose — in order to prevent any bias on the part of the college — in practice, some colleges identified specific instructors to observe, and some granted access to fewer than 16 instructors. It has proven extremely difficult to observe adjunct instructors because they do not respond to

queries asking for their participation; we suspect that paying them at their hourly rate would improve participation dramatically.

The 13 colleges were all located in California, partly because of proximity and familiarity to the researchers, and partly because of the interests of the Hewlett Foundation. About one quarter of all community college students in the country are located in California, so the state is important in terms of its size. While we think California colleges are generally representative of community colleges in other states, it has some unique features that make it unrepresentative: tuition is relatively low, and so a higher proportion of students may enroll casually, without well-considered plans; overall state funding per student is quite low and has been declining; the governance of the community college system is incoherent and embattled, with the state legislature intervening, the state Chancellor's Office developing voluminous regulations, 108 local colleges asserting their independence, and many interest groups (e.g., academic Senates, unions, librarians, English teachers) expressing their positions. In addition, the poor state of K-12 education — the state ranks near the bottom of all states on the National Assessment of Educational Progress — means that all too many high school graduates are unprepared for college-level work.

The state has had one particular initiative in the area of basic skills, the Basic Skills Initiative, that has provided \$33 million per year since 2007. One focus of the institutional questions we asked, therefore, was to determine how different colleges decided to spend their BSI funds.

We choose the 13 colleges in several ways. Two of them, which we think of as test sites, are well known to the researchers and located close to them, so we could revisit them as necessary. Results from these first two sites then allowed us to modify the interview and observational protocols we used in the remaining site. We chose 4 additional colleges because of information that they were using some innovative practices, information we collected by polling the Basic Skills Coordinators in the state. Unfortunately, while 3 of these 4 colleges provided to be innovative in many ways, the other three were not, or were planning innovations that had not yet take place. One implication is that the reputational knowledge about basic skills programs in California is not very accurate. Once again, it proves necessary to visit a college, and observe many classes, before anyone can understand what a college is (or is not) doing.

The remaining colleges were chosen in an attempt to identify high- and low-quality basic skills programs. We started from Bahr's (2010) paper on the probability of individuals enrolled in remedial courses moving into college-level work within five years. Bahr calculated the individual residuals from his estimating equations — that is, the tendency for individuals to do relatively well or badly, *after* controlling for the independent variables he was able to include in these equations. These residuals were then aggregated to the college

level, and average college residuals in reading and math were calculated. These should be colleges who, given the composition of their students, have particularly effective and ineffective basic skills programs. We selected three colleges with high average residuals on reading *and* on math, and three colleges with low average residuals on both reading and math. Only I knew which these colleges were; the visiting researchers did not, in order not to bias them in any way. Unfortunately this method of choosing effective and ineffective colleges worked poorly: several of the apparently exemplary colleges were middle-class suburban institutions, included because Bahr's explanatory variables do not include powerful enough measures of family background. Another supposedly exemplary college probably benefited from its proximity to a state university, but proved to have a weak basic skills program. The five colleges selected in this way therefore constituted a nearly random sample of California colleges, not a selection of high- and low-quality colleges.

In the end, our 13 colleges represent a broad cross-section of California colleges, located in both northern and southern regions of the state, with 5 suburban colleges and 6 that can be considered urban; none of our colleges is truly rural.

The results of these case studies will be analyzed more carefully in fall 2010. In the year 2010–2011, we plan to revisit colleges with cohesive English or math departments, to examine the conditions in which these innovative departments arise. We will examine more carefully the efforts to develop innovative practices, for example by observing examples of Reading Apprenticeship and math innovations, to see how such potential improvements in instruction are incorporated into community colleges. We hope to work with two or three colleges with strong data to see if it is possible to carry out evaluations of particular approaches to basic skills, like the evaluation Wiseley (2010) has carried out. And we hope to interview students, both individually and in focus groups, since their voices are missing from most of the research on basic skills.